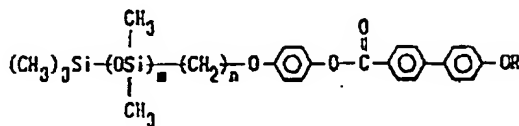


EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 01144491
PUBLICATION DATE : 06-06-89

APPLICATION DATE : 01-12-87
APPLICATION NUMBER : 62303741



APPLICANT : TOSHIBA CORP;

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INT.CL. : C09K 19/40 C07F 7/08 C09K 19/46

TITLE : LIQUID CRYSTAL MATERIAL

ABSTRACT : PURPOSE: To obtain a liquid crystal material containing a specific ferroelectric liquid crystal material, having broad temperature range of chiral smectic C phase in low-temperature side, small rotary viscosity coefficient, large spontaneous polarization, quick response and excellent mechanical shock resistance.

CONSTITUTION: The objective material contains one or more compounds of formula [m is 0~5; n is 2~10; OR is optically active alkoxy or aralkyloxy (preferably 1-methylpeptyloxy or 2-methylbutyloxy)]. The above compound can be synthesized by reacting an optically active alcohol with p-toluenesulfonic acid chloride, heating the reaction product together with 4'-hydroxybiphenyl-4- carboxylic acid in the presence of an alkali, halogenating the product, reacting the halogenated product with an alkenyloxyphenol and reacting with trimethyldimethylpolysiloxane in the presence of a platinum catalyst.

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